NATIONAL HONEY REPORT

United States Department of Agriculture
Agricultural Marketing Service
Fruit and Vegetable Programs
Market News Branch

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HONEY MARKET FOR THE MONTH OF November, 2009
IN VOLUMES OF 10,000 POUNDS OR GREATER UNLESS OTHERWISE STATED

Prices paid to beekeepers for extracted, unprocessed honey in major producing states by packers, handlers & other large users, cents per pound, f.o.b. or delivered nearby, containers exchanged or returned, prompt delivery & payment unless otherwise stated.

- REPORT INCLUDES BOTH NEW AND OLD CROP HONEY -

(# Some in Small Lot --- +Some delayed payments or previous commitment)

ARKANSAS				
Soybean	extra light amber	$1.35		
CALIFORNIA				
Alfalfa	extra light amber	$1.36	-	$1.41
Alfalfa	light amber	$1.24	-	$1.30
DAKOTAS				
Clover	white	$1.41	-	$1.45
Sunflower	white	$1.42		
Sunflower	light amber	$1.25	-	$1.30
FLORIDA				
Brazilian Pepper	light amber	$1.16	-	$1.25
IDAHO				
Clover	white	$1.40	-	$1.44
MINNESOTA				
Clover	white	$1.42	-	$1.50
MONTANA				
Clover	white	$1.40	-	$1.45
OREGON				
Wildflower	light amber	$1.25	-	$1.30
UTAH				
Clover	white	$1.45		

Prices paid to Canadian Beekeepers for unprocessed, bulk honey by packers and importers in U. S. currency, f.o.b. shipping point, containers included unless otherwise stated. Duty and crossing charges extra. Cents per pound.

Province Not Reported –

Too Few to Report

Prices paid to importers for bulk honey, duty paid, containers included, cents per pound, ex-dock or point of entry unless otherwise stated.

Argentina				
Mixed Flowers	white	$1.49		
Mixed Flowers	extra light amber	$1.36	-	$1.49
Brazil				
Mixed Flowers	extra light amber	$1.34		
Mixed Flower	light amber	$1.16	-	$1.22
Vietnam				
Mixed Flowers	light amber	$1.12	-	$1.14

COLONY, HONEY PLANT AND MARKET CONDITIONS DURING NOVEMBER, 2009

APPALACHIAN DISTRICT (MD, PA, VA, WV): Seasonable weather has been very good for colonies in the Appalachian District with slower colony activity, as expected, due to the onset of cooler temperatures. Overall, there was a 4-10° increase in moisture levels compared with November 2008 from scattered storms and the remnants of Hurricane Ida. Only a few cities in District reported less rainfall. Generally, colonies are going into the winter with ample honey stores and fairly healthy. Some beekeepers have shipped or are preparing colonies to be shipped to California for almond pollination.

ALABAMA: Honey production was about average in southern Alabama in 2009 and beekeepers reported adequate supplies for customers. In northern Alabama, beekeepers suffered a bad production year and reported insufficient supplies. Some were trying to buy honey from other beekeepers to supply customers. Throughout the state, beekeepers were providing supplemental food. Some also reported problems with queen supersedure.

ARIZONA: Temperatures in Arizona were above normal at the beginning and end of November, and were at or below normal mid-month. Temperatures ranged from a high of 98°F in Coolidge to a low of 7°F at Canyon De Chelly. There was little precipitation. A maximum of 8 out of 22 stations reported any precipitation during the weeklong reporting periods across the state; the highest level reported at a station for an entire week was 0.68 inches. None of the 22 reporting districts were above normal precipitation levels for the year, and 20 out of 22 stations were less than 60 percent of normal precipitation levels for the year. The main nectar and pollen sources were melons and desert plant bloom. Demand for honey remained good.

ARKANSAS: Asters provided pollen and nectar. Colonies were in fair condition. Temperatures were below normal and rainfall was above normal. Supply and demand remained good.

CALIFORNIA: High pressure over the Western U.S. brought strong and gusty northerly winds to California early in the month. Temperatures were well above normal with abundant sunshine. As the month progressed, most of California was dominated by a Pacific High. A fast moving cold front pushed across the north, resulting in widespread showers. This system did not bring rain to Southern California, but it did cool temperatures. A cold front approached the northern coast, moving across the northern portion of the State, spreading rain showers across the valley and snow in the northern mountains. These showers were spotty; some areas received moderate amounts of rain, while adjacent areas received practically none. The low pressure associated with this storm moved into southern California and brought scattered precipitation to that part of the State. Both in-state and out-of-state honeybees were moved to winter locations in preparation for spring pollination. Most bees are being wintered and the bees are being fed sugar water. Bees in Northern California are still feeding on bottlebrush, yellow mustard, some early eucalyptus trees and lavatera maritime (tree mallow).

COLORADO: Colorado beekeepers began shipping hives out to California to over-winter in mid to late November. Temperatures were in the 40s during the day, good weather for keeping the bees dormant but not freezing them. Beekeepers were optimistic that honey prices may rise if southern hemisphere countries don't produce enough for the world market. Rumors of an autumn die off in northern states have some producers concerned as die off usually occurs in early to mid-January when the bees are brought out of dormancy.

FLORIDA: Many beekeepers from Florida and other parts of the country move their hives to south Florida in November and split them in an effort to increase bee numbers. Theses producers will not usually move the hives again until January or early February when they are relocated to California for almond pollination. The mild winter weather in south Florida gives the hive a chance to rebuild in strength and numbers. Temperatures have been about normal. Many areas received little rain while others received above average. Sources of pollen were slight, and included mustard, citrus, gallberry, Spanish Needle and goldenrod. The hives in 2009 saw a reduction in honey production estimated to be between 30-50% for the entire state with little or no reserves going into the winter season. This reduction has been mainly attributed to excessive rainfall during the summer. Producers were providing supplemental food in the form of a combination of sugar water, high fructose corn syrup, and "pollen patties", a high protein food comprised mainly of soybean meal. Many producers were experiencing health problems. Varroa mites, small hive beetles and CCD (Colony Collapse Disorder) were among the most prevalent problems. A relatively new type of Nosema (ceranae) is becoming a larger problem as it appears to be resistant to conventional treatments. Many producers were treating for mites and beetles. The North American Beekeeping Conference & Tradeshow will be held in Orlando, Florida this year January 12-16, 2010.

GEORGIA: Most beekeepers were preparing for the winter season and reported that the bees were doing well. A few had losses up to forty percent for the year after a rough fall in the southern part of the state. The hives were being supplemented with food. Beekeepers throughout the state seemed optimistic for next year. A few areas still have sparse feed available in pollen from late sunflower patches, squash, wild turnips and goldenrod. There was a strong interest and demand for honey bees available for sale. Several of the merchants are already booked and are sold out for future sales later in the spring months. Beekeeping appears to be on the rise and more support is available today than in past years. With online usage and media outlets, information is readily available all the time. Addressing some of the problems that have confronted the industry is still of major concern. Colony collapse disorder, queenless hives, insect and bacterial issues are at the forefront and beekeepers from all over the country are working with universities, state and federal inspectors, and each other to get solutions to the problems.
Prices:
Tupelo: Case of 12 pints-$60 One quart $13.75 One gallon $50
Orange blossom: Case of 12 pints-$37
Gallberry: Case of 12 pints-$36

IDAHO: Idaho hives started their migration into storage at the end of November. Some producers have experienced a higher death toll of bees than expected since September. Many producers are contracted for the almond bloom in California starting in February and will be moving bees out west in late January to acclimate them. With a cold autumn many beekeepers fed during the fall to ensure healthy hives going into the dormant period.

ILLINOIS: Not available at time of release.

INDIANA: Not available at time of release.

IOWA, KANSAS, MISSOURI, NEBRASKA: Weather conditions continued to be abnormal for the time of year. Temperatures on average were above normal and precipitation was below normal. Some snow was recorded around Lincoln, Nebraska. Beekeepers started inspecting the hives in preparation of winterizing. Many beekeepers were anticipating earlier spring feedings than normal. Beekeepers were also attending club meetings and beekeeping classes.

KENTUCKY: Not available at time of release.

LOUISIANA: Wildflowers provided pollen and nectar. Colonies were in generally good condition. Temperatures were below normal and rainfall was adequate. Supply and demand were good.

MICHIGAN: Temperatures were above normal levels during the month and ranged from a high of 73°F in Holland to a low of 16°F in Marquette. There was much precipitation across the state in the first and last week of November, while conditions were dry mid-month. Supplemental feeding of many hives took place across the state. There have also been cleansing flights. Migratory beekeepers have left for Florida and other southeastern states. Demand for honey was good.

MINNESOTA: Varroa mites were very active this fall and believed to be the cause of much of the early die off that many experienced in the Minnesota/North Dakota area. One possible explanation is that a new treatment for the mites didn't work as well as the old treatment; thereby allowing for the mites to continue uninhibited. Producers said that the bees not affected by mites look exceptionally healthy. Most beekeepers have moved their bees out of Minnesota for the winter to either California or Gulf Coast states.

MISSISSIPPI: Bees were in good shape heading into winter. Most were feeding on honey. Therefore, supplemental feeding wasn't expected to be necessary until January. A few had queenless hives and have had to supplement the hives to strengthen them for the winter months ahead. They appeared to be strong heading into the colder weather. Weather conditions over the last year may have had an effect on some colonies; although, beekeepers seemed to have it under control with heavier feeding in the last couple of months to get the bees back into condition. Sales of bees have been strong with many orders for after January booked up. Interest and demand for honey bees has been good from the commercial beekeepers and new hobbyists are starting to show up at meetings and workshops all over the Southeast.
Prices: Popcorn (tallow) pint-$4 case of 12-$48 quart-$6 case of quarts-$72 gallon-$20

MONTANA: Most areas experienced near normal temperatures during November with varying amounts of precipitation. At the end of the month, topsoil moisture measured 11 percent very short, 40 percent short and 49 percent adequate. Subsoil moisture measured 43 percent short and very short, and 47 percent adequate and surplus. Late row crop harvesting continued and winter grain seeding was completed with 92 percent emerged. Most keepers were finished with their fall inspections and winter preparations and were working on equipment repair. Migratory colonies were being shipped to California for the spring bloom or warmer climates. Colonies were in generally good condition. Honey demand was good.

NEW ENGLAND: New England weather for the month of November featured warm, milder than normal temperatures with the daytime highs in the high 50s to low 60s and with normal precipitation resulting in average moisture levels for the entire region. Due to the warm weather the bees have been working off the remaining late blooming floral nectar and especially pollen sources such as buckwheat, mint especially mountain mint, wing stem, teasel, figwort, burdock, purple coneflower, heather, bonset, fireweed, ironweed, star thistle and particularly aster and goldenrod. Nectar sources have quickly diminished by the end of the month with just a few pollen sources remaining which are hard to identify which ones the bees are using. Many keepers reported finding drones still in their hives thus the "girls" were very late this year in evicting the drones. In many colder regions some honey robbing between hives due to depleted nectar supplies and food sources reported. Entrance reducers purportedly have been very effective in this regard. Overall perception is that New England hives have required heavy feeding this year due to little nectar flow in August/September plus it was simply too wet and we never had any summer heat which is important to nectar production and foraging conditions. Aside from the low honey crop is the additional problem it creates for colony growth. Package and summer splits did not build up well compared to years when foraging was plentiful. Currently there is later egg laying by all queens with slightly larger egg patterns. Honey stores on brood frames are very small although in many cases large quantities of pollen are found. Limited pollen and nectar means less brood and poor nutrition. This will likely contribute to creating a greater winter loss as many colonies are light and their winter bees were not developed under the best of conditions. Reportedly, it seems that the entire cold weather fall preparation and (IPM) integrated pest management programs for bee colonies are 30 to 45 days behind past seasons. Many keepers are still open feeding sugar syrup (2:1) and have found a good percentage of their hives gaining enough weight to make it through the winter. However, the vast majority of beekeepers have finished with their integrated pest management programs and have the last of their formic acid treatments in working. Most keepers are now feeding with pollen patties and fondant and have secured their hives for the winter. Beekeepers report colonies to be in good to very good condition with mite problems under control and bees looking healthy. The main issues this year reportedly were queen problems being reported by beekeepers at all levels of ability. This could possibly be the result of increased viral infections in queens due to varroa mites vectoring the spread of disease. Generally speaking most beekeepers I have spoken with are calling this years' honey season very poor because the yields are half what they usually are. Estimates at 30-35 lbs per colony verses 50 lbs last year and last year was not a great production year. Demand at farmers markets, local road side stands and all retail/wholesale outlets are strong. Honey sales remains very good and continues to grow in spite of price increases. Supplies of new crop locally produced honey are very short and in many places are scarce. Prices quoted for 1 lb bottled units were higher at $7.00 to $9.00 mostly $9.00 occasionally higher inclusive of all varieties; for food service operations prices were higher with wholesale 5 gallon units at $150.00 to $200.00 mostly $175.00 and occasionally lower for both light and dark raw honey depending on variety and quality.

NEW YORK: Supplemental feeding of many hives took place across the state. There have also been cleansing flights. Migratory beekeepers have left for Florida and other southeastern states. Demand for honey was good.

NORTH CAROLINA: An abundant amount of precipitation was received during November. The western part of the state received 2.25 inches above normal and the average range of temperatures were 38 to 58 degrees. The eastern part of the state received 3.21 inches above normal with average temperatures ranging from 42 degrees to 61 degrees. According to the North Carolina Drought Council, only 8 counties remain in the abnormally dry

category in the state. Beekeepers continued supplemental feeding and were checking hives for any mite problems. Beekeepers continued to paint and work on equipment that was stored away. The holiday season for honey sales was expected to be excellent for available supplies.

NORTH & SOUTH DAKOTA: The weather was cooler with light snowfall across much of the region. Bees were moved to their winter homes – typically potato sheds or Southern locations.

OHIO: **Not available at time of release**.

OKLAHOMA: In southern Oklahoma, pines and nut bearing trees provided pollen and nectar. Colonies were strong. Temperatures swung wildly during the month from above normal to near freezing with rain. Supplies were adequate and demand was very high. In northern Oklahoma, there were no sources of pollen and nectar. Colonies were in good condition. Temperatures were below normal and rainfall was abundant. Supply and demand were good.

OREGON: At the end of November, topsoil measurements statewide were 2 percent very short, 8 percent short, 74 percent adequate, and 16 percent surplus. Subsoil measurements were 29 percent short and very short, and 71 percent adequate and surplus. During the month, there were beneficial periods of moisture with rain in the valleys and snow in the higher elevations. High temperatures ranged from 63°F in Bandon, Tillamook to 42°F in Joseph. Lows ranged from 7°F in Burns to 39°F in Astoria/Clatsop. Keepers were busy with winterizing chores. Some colonies were shipped to California wintering areas and others kept their colonies closer to home for winter. Colony health was good. Keepers expressed a bit of uncertainty in negotiating contract pricing with their California growers for the upcoming bloom. Continuing California water issues, a moderate almond market, and the strength of the colonies next spring after a generally less than average crop year this year were several of the factors mentioned for this concern. Wild plants and irrigated farm crops were finished for the season. Honey demand was good.

SOUTH CAROLINA: Not available at time of release.

TENNESSEE: Across the state, beekeepers were feeding to make up for a lack of honey stores. Honey production for the year was very poor at about 25% of normal production.

TEXAS: Pollen and nectar sources were mostly from aster. Colonies were in fair condition. Continued wet weather has reduced brood levels below normal fall conditions. However, bees are ok with pollen supplements and syrup feedings. Temperatures have been cooler and there has been much rain. Supply was limited and demand remained high.

UTAH: Many producers in Utah keep the bees at home until December so November is an inactive month. After feeding and treatment for mites in the early fall dormancy sets in and the bees are left alone. Temperatures have been in the 40s, perfect for bee dormancy.

WASHINGTON: Temperatures were seasonally cooler and there has been some snow in the mountains. Temperatures were forecast in early December for single digits in many areas. Bees have been moved to their winter homes, either locally or down South.

WISCONSIN: Not available at time of release.

U.S Exports of Honey By Country, Quantity, and Value

	October 2009		Year to Date	
	Quantity Kilograms	Value Dollars	Quantity Kilograms	Value Dollars
COMB & NATURAL HONEY PACKAGED FOR RETAIL SALE - - -				
Aruba	2,233	11,967	12,660	65,353
Bahamas; The	0	0	5,302	32,916
Bahrain	0	0	26,106	85,397
Barbados	0	0	5,166	31,952
Bermuda	748	4,690	3,997	23,783
Cayman Islands	0	0	1,317	7,589
China	6,966	28,380	54,819	221,013
Germany	0	0	532	3,900
Guyana	980	6,642	2,505	16,887
Honduras	0	0	392	3,075
Hong Kong	0	0	2,574	15,536
Iceland	2,682	4,125	8,880	24,199
Indonesia	5,403	13,114	30,059	88,456
Japan	14,706	49,680	167,126	677,768
Korea; South	75,736	276,376	168,569	609,845
Kuwait	18,751	100,657	176,188	586,339
Libya	0	0	12,341	49,360
Malaysia	0	0	24,769	48,682
Mexico	1,051	2,550	2,812	9,170
Netherlands Antilles (exc. Aruba)	0	0	1,986	8,827
Pakistan	0	0	12,697	52,139
Panama	0	0	5,185	27,329
Philippines	0	0	187,370	482,941
Qatar	5,414	13,142	8,199	28,142
Russia	0	0	3,737	9,072
Saudi Arabia	0	0	57,579	180,628
Singapore	0	0	6,465	15,870
Taiwan	0	0	225,128	421,350
Turkey	0	0	14,184	53,880
United Arab Emirates	0	0	170,268	541,930
Yemen	39,872	168,740	527,914	1,745,578
SUBTOTAL	**174,542**	**680,063**	**1,926,826**	**6,168,906**
NATURAL HONEY, NOT ELSEWHERE INDICATED OR SPECIFIED - - -				
Antigua and Barbuda	0	0	4,233	26,698
Aruba	676	3,556	6,873	30,240
Australia	0	0	12,045	37,009
Bahamas; The	1,752	6,787	19,729	68,557
Barbados	852	4,550	9,143	32,443
Belize	0	0	6,689	25,706
Bermuda	0	0	1,829	17,668
Cambodia	1,205	6,828	1,205	6,828
Canada	32,475	118,420	488,423	1,874,353
Cayman Islands	0	0	2,791	16,187
China	0	0	28,692	85,736
Denmark	0	0	480	5,421
Ecuador	0	0	3,976	9,652
Guatemala	0	0	28,229	63,360
Hong Kong	14,113	50,504	25,770	89,351
India	0	0	78,226	162,315
Indonesia	0	0	172,251	316,730
Jamaica	0	0	10,377	41,240
Japan	6,833	37,099	219,200	775,913
Korea; South	540	3,000	8,287	29,561
Kuwait	26,064	38,850	26,064	38,850
Malaysia	0	0	20,795	69,058

	October 2009		Year to Date	
	Quantity Kilograms	Value Dollars	Quantity Kilograms	Value Dollars
Netherlands	0	0	17,753	57,727
Netherlands Antilles (exc. Aruba)	0	0	485	3,116
Panama	852	4,550	28,627	160,191
Philippines	0	0	5,872	37,155
Saudi Arabia	0	0	70,789	310,550
Singapore	0	0	10,544	74,231
Thailand	7,317	17,759	28,870	72,825
United Arab Emirates	666	7,126	18,569	109,672
Vietnam	0	0	20,000	31,000
Yemen	0	0	887	3,000
SUBTOTAL	**93,345**	**299,029**	**1,377,703**	**4,682,343**
GRAND TOTAL	**267,887**	**979,092**	**3,304,529**	**10,851,249**

U.S Imports of Honey By Country, Quantity, and Value

	October 2009			Year to Date		
	Quantity Kilograms	Value Dollars	CIF Value Dollars	Quantity Kilograms	Value Dollars	CIF Value Dollars
WHITE HONEY – NOT PACKAGED FOR RETAIL SALE - - -						
Argentina	416,360	1,186,082	1,228,326	2,617,662	7,663,970	7,927,462
Australia	0	0	0	97,502	255,975	265,953
Brazil	230,001	655,256	674,171	1,139,030	3,131,887	3,264,670
Canada	465,501	1,628,301	1,637,757	5,073,810	15,698,738	15,802,741
China	0	0	0	7,375	17,331	19,064
Egypt	21,000	55,650	58,850	21,000	55,650	58,850
France	0	0	0	263	4,271	4,528
India	26,766	80,466	85,558	4,475,721	9,840,980	10,575,593
Indonesia	38,280	63,928	68,928	3,975,506	6,742,063	7,100,049
Japan	0	0	0	18,813	41,129	42,339
Mexico	0	0	0	507,436	1,531,330	1,557,451
Monaco	0	0	0	324	5,406	5,490
Morocco	0	0	0	451	2,145	2,422
New Zealand (exc. Cook; Niue; & Tokelau)	0	0	0	7,441	46,600	48,225
Peru	0	0	0	18,000	42,425	44,425
Poland	0	0	0	606	3,559	3,744
Russia	0	0	0	15,036	89,181	93,181
Spain	0	0	0	18,200	74,782	80,632
Switzerland	353	2,538	2,583	706	5,121	5,261
Taiwan	0	0	0	153,120	209,152	227,677
Thailand	18,600	38,130	40,530	71,400	141,090	152,390
Turkey	0	0	0	19,140	53,209	55,709
Ukraine	19,000	50,350	52,350	56,990	146,914	152,914
United Kingdom	0	0	0	4,835	50,347	52,198
Vietnam	56,050	118,623	127,503	205,750	410,205	441,915
SUBTOTAL	**1,291,911**	**3,879,324**	**3,976,556**	**18,506,117**	**46,263,460**	**47,984,883**

	October 2009			Year to Date		
	Quantity Kilograms	Value Dollars	CIF Value Dollars	Quantity Kilograms	Value Dollars	CIF Value Dollars
EXTRA LIGHT AMBER HONEY – NOT PACKAGED FOR RETAIL SALE - - -						
Argentina	638,069	1,828,243	1,891,261	5,109,021	15,104,695	15,626,396
Australia	0	0	0	95,967	253,192	263,192
Brazil	238,013	657,155	679,744	3,094,688	7,638,872	7,952,833
Canada	4,041	19,940	20,174	68,118	253,407	257,776
France	0	0	0	1,782	18,806	20,306
Hungary	0	0	0	18,900	50,085	52,585
India	0	0	0	3,055,333	6,557,656	6,928,052
Italy	195	3,504	3,604	1,082	19,107	21,527
Malaysia	223,200	279,792	311,462	2,842,720	4,507,142	5,012,511
Mexico	19,102	60,171	60,671	193,154	550,468	555,468
Mongolia	108,996	152,594	165,794	835,636	1,039,094	1,143,494
New Zealand (exc. Cook; Niue; & Tokelau)	0	0	0	7,216	12,727	13,858
Pakistan	0	0	0	95,000	194,750	207,250
Peru	18,600	42,408	44,326	53,800	126,542	132,460
Romania	0	0	0	30,800	85,008	89,189
Taiwan	440,220	806,751	870,951	4,009,830	6,981,220	7,566,220
Thailand	0	0	0	1,237,800	1,419,510	1,555,003
Turkey	0	0	0	19,140	52,635	54,635
Ukraine	0	0	0	286,250	710,447	739,955
Uruguay	0	0	0	19,339	50,281	52,781
Vietnam	267,600	561,960	592,346	1,353,740	2,583,059	2,741,878
SUBTOTAL	**1,958,036**	**4,412,518**	**4,640,333**	**22,429,316**	**48,208,703**	**50,987,369**
LIGHT AMBER HONEY – NOT PACKAGED FOR RETAIL SALE –						
Argentina	149,134	425,111	434,443	2,054,970	6,286,355	6,496,308
Australia	0	0	0	364	3,433	3,434
Austria	0	0	0	235	2,173	2,239
Brazil	882,404	2,083,048	2,173,146	10,446,457	24,273,966	25,411,731
Bulgaria	0	0	0	2,339	11,319	12,349
Canada	0	0	0	41,779	154,672	155,769
Chile	0	0	0	5,999	16,557	17,376
China	0	0	0	12,390	21,682	23,850
Dominican Republic	0	0	0	6,971	16,830	17,809
France	0	0	0	75,571	170,714	178,766
Guatemala	0	0	0	38,640	84,888	88,828
Hong Kong	4,104	25,992	26,757	12,528	79,344	81,534
India	515,373	1,136,670	1,184,142	3,566,735	7,416,437	7,883,182
Italy	388	4,602	4,798	1,787	28,252	31,142
Malaysia	798,080	1,221,062	1,327,399	3,621,406	5,536,932	5,986,893
Mexico	50,108	119,966	124,196	238,456	617,263	631,272
New Zealand (exc. Cook; Niue; & Tokelau)	33,178	106,165	108,026	84,238	370,371	377,994
Pakistan	0	0	0	17,920	39,424	41,824
Peru	0	0	0	76,928	202,954	213,570
Saudi Arabia	0	0	0	6,972	13,944	15,644
Spain	510	6,847	7,072	12,796	61,285	62,954
Taiwan	95,700	170,729	178,729	116,861	210,007	219,759
Thailand	204,300	433,725	458,891	408,000	827,804	870,358
Ukraine	61,000	142,587	147,188	63,917	146,739	151,610
Vietnam	1,821,078	3,405,628	3,597,710	14,569,858	28,796,736	30,408,340
SUBTOTAL	**4,615,357**	**9,282,132**	**9,772,497**	**35,484,117**	**75,390,081**	**79,384,535**

	October 2009			Year to Date		
	Quantity Kilograms	Value Dollars	CIF Value Dollars	Quantity Kilograms	Value Dollars	CIF Value Dollars
NOT OTHERWISE SPECIFIED OR INDICATED ---						
Argentina	0	0	0	1,960	9,395	9,606
Australia	0	0	0	23,180	135,181	147,961
Brazil	55,376	113,238	117,238	999,785	2,160,460	2,282,284
Canada	39,587	92,324	94,333	1,249,750	4,114,373	4,116,860
Czech Republic	2,125	14,664	15,235	2,125	14,664	15,235
Dominican Republic	10,530	19,500	20,586	59,823	114,700	121,269
Germany	26,712	156,655	160,855	54,936	301,744	310,844
Ghana	0	0	0	4,763	8,400	9,796
Greece	0	0	0	1,099	8,012	9,115
Honduras	0	0	0	3,000	10,820	14,295
India	16,024	46,790	49,250	267,065	560,712	594,147
Israel	0	0	0	8,736	26,728	27,595
Italy	0	0	0	300	2,161	2,266
Lithuania	0	0	0	4,973	28,080	30,746
Malaysia	0	0	0	182,931	142,720	161,915
Mexico	22,194	63,272	63,792	405,371	1,078,484	1,084,139
Morocco	0	0	0	852	7,084	7,416
New Zealand (exc. Cook; Niue; & Tokelau)	42,439	74,848	76,350	418,286	919,235	944,081
Poland	3,804	23,318	23,435	6,102	37,278	37,465
Russia	0	0	0	34,785	218,308	230,722
Spain	0	0	0	706	5,971	6,271
Switzerland	1,250	14,685	15,985	8,436	104,026	109,520
Taiwan	0	0	0	3,825	29,229	30,067
Thailand	18,600	40,920	43,366	18,600	40,920	43,366
Ukraine	2,615	11,973	12,473	6,920	26,636	28,505
United Kingdom	0	0	0	2,345	14,986	15,521
SUBTOTAL	**241,256**	**672,187**	**692,898**	**3,770,654**	**10,120,307**	**10,391,007**
COMB AND RETAIL HONEY –						
Argentina	0	0	0	3,240	15,670	16,381
Australia	730	10,725	11,225	20,779	95,528	107,448
Austria	8,883	21,215	22,786	47,325	259,820	283,343
Brazil	0	0	0	11,452	41,763	42,367
Bulgaria	10,624	50,738	52,238	88,742	314,192	333,466
Canada	97,498	460,716	462,322	1,002,635	4,932,938	4,950,678
Chile	0	0	0	9,455	68,796	71,333
China	0	0	0	3,500	3,500	4,226
Cyprus	0	0	0	557	7,953	9,242
Dominican Republic	0	0	0	76,377	115,084	118,907
Egypt	0	0	0	20,628	43,937	47,326
France	180	3,922	4,108	39,884	380,897	393,570
Germany	12,556	58,936	61,436	160,203	728,217	762,995
Greece	0	0	0	55,394	410,115	428,222
Guatemala	0	0	0	3,554	8,517	8,927
Hungary	2,588	15,162	16,142	13,791	81,242	86,095
India	147,034	308,414	327,900	830,477	1,868,276	1,989,176
Indonesia	7,902	32,968	33,533	18,781	81,423	83,243
Israel	653	4,572	4,772	2,213	16,144	16,804
Italy	812	7,499	8,011	22,008	179,317	188,740
Korea; South	2,182	5,381	5,862	2,182	5,381	5,862
Lebanon	3,703	13,110	13,826	9,466	45,530	48,839
Lithuania	0	0	0	6,756	23,260	25,587
Malaysia	0	0	0	40,826	66,000	72,768
Mexico	0	0	0	5,311	35,148	36,251

	October 2009			Year to Date		
	Quantity Kilograms	Value Dollars	CIF Value Dollars	Quantity Kilograms	Value Dollars	CIF Value Dollars
COMB AND RETAIL HONEY - - - Cont'd						
Moldova	794	4,062	4,468	7,581	28,176	30,929
Monaco	857	9,507	9,806	14,763	66,325	67,758
New Zealand (exc. Cook; Niue; & Tokelau)	1,200	13,518	14,073	298,061	832,642	877,554
Pakistan	0	0	0	2,409	8,498	8,866
Peru	0	0	0	13,669	69,554	71,568
Poland	480	3,885	4,369	34,000	54,801	59,505
Portugal	0	0	0	6,600	43,965	45,627
Russia	2,064	2,823	3,105	19,434	84,083	92,508
Spain	2,419	14,176	15,092	63,614	256,927	275,318
Sweden	0	0	0	594	4,489	4,708
Switzerland	13,418	69,553	74,311	83,875	349,681	368,034
Taiwan	21,103	28,861	31,289	551,896	957,152	1,030,293
Turkey	0	0	0	15,524	98,942	101,505
Ukraine	18,883	60,688	66,757	62,039	160,735	176,754
United Kingdom	0	0	0	165	4,416	4,612
Vietnam	0	0	0	32,249	79,049	86,024
SUBTOTAL	**356,563**	**1,200,431**	**1,247,431**	**3,702,009**	**12,928,083**	**13,433,359**
FLAVORED HONEY - - -						
Canada	0	0	0	16,581	26,419	26,769
China	0	0	0	12,327	139,933	143,172
France	0	0	0	420	5,729	5,862
Italy	2,115	27,602	28,766	4,611	60,126	62,611
Korea; South	0	0	0	11,812	45,748	47,506
Mexico	15,026	142,666	143,613	101,650	978,791	985,994
Switzerland	0	0	0	2,120	18,840	19,308
Taiwan	0	0	0	3,827	8,541	8,864
Thailand	10,980	45,000	46,203	37,244	150,180	154,533
SUBTOTAL	**28,121**	**215,268**	**218,582**	**190,592**	**1,434,307**	**1,454,619**
GRAND TOTAL	**8,491,244**	**19,661,860**	**20,548,297**	**84,082,805**	**194,344,941**	**203,635,772**

Source for U. S. Import and Export Data: U.S. Department of Commerce

Pacific Northwest Honey Bee Pollination Economics Survey 2009

by
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Since 1986 the Honey Bee Laboratory at Oregon State University has conducted an annual survey of pollination economics in the Pacific Northwest (PNW). The information from each year of the survey has been made available both regionally and nationally. The information has proved to be most useful to individual beekeepers who generate income from pollination rental, which is the primary source of income for the majority of commercial beekeepers in the PNW.

The use of managed honey bee colonies for commercial crop pollination remains the most important function of the PNW beekeeping industry. The vast and diverse agriculture of the region relies on a healthy and strong beekeeping industry to maintain optimum production. An enhanced knowledge of pollination economics is crucial to every beekeeper that enters into the world of commercial crop pollination.

The USDA National Agriculture Statistical Service estimates that there are 92,000 production honey bee colonies in the PNW (Oregon and Washington). With these numbers there are some interesting hypothetical calculations that can be made. For instance, if all growers of crops that require or benefit from managed honey bee pollination in the PNW, were to rent 2 colonies for each acre of crop that relies on and/or benefits from bee pollination (ca. 350,000 acres), the resulting pollination requirement would utilize 700,000 colony rentals. If we multiply the hypothetical rentals by the 2009 average colony rental fee (89^{90}) it results in a potential pollination rental income of nearly 63 million dollars for PNW beekeepers. If we add to this the estimated 2009 California almond pollination income, available to PNW commercial beekeepers ($27 million), we end up with a potential gross pollination rental income of 90 million dollars. Another way to look at this is by asking the question, 'how much pollination income, under optimized conditions, should have been produced from one commercial PNW honey bee colony in the year 2009?' For 2009 that figure is approximately $978 per hive. Which is obviously unattainable, if for no other reason than the impossibility of one colony being sequentially utilized in all of the necessary cropping systems required to produce such a hypothetical per colony income.

Comparing the hypothetical PNW rental income (63 million $) to the farm-gate value of the crops pollinated in the PNW (2.73 billion $) shows that the money spent by growers to ensure adequate pollination is about 2.3% of the total crop value. This is an impressive illustration of what a remarkable bargain pollination rental is to the commercial agricultural industry of the PNW.

The 2009 pollination survey continues to illustrate the critical reliance of PNW beekeepers on income generated from colony rentals. For 2009 the average commercial beekeeper reported receiving 71% of his or her annual operating gross from pollination rental, which is a slight increase from the 2008 crop year. This percentage shows the dominance of pollination rental income to a PNW beekeeper's financial "health".

Recent increases in the average pollination rental fee have been strongly influenced by the dramatic rise in the pollination rental fees paid by California almond growers. In 2005 almond growers responded to a perceived shortage of colonies by dramatically increasing the price they were willing to pay for pollination; this has continued for the 2009 pollination season. The average almond pollination fee for 2009 was 150^{25}. This is a 89% increase from the 2005 average (79^{40}) but only a 1.5% increase from the average almond pollination fee paid in 2008 (148^{15}). Almond pollination is a target crop for nearly all commercial beekeepers in the Pacific Northwest and represents the beginning of the annual pollination season.

For 2009 the average pollination rental fee, computed from commercial colony rentals on all crops reported (including almonds), was 89^{90}. This is a 10.8% increase from the average pollination fee paid in 2008 (81^{15}) (see Table 1). Table 2 provides the average rental fees by crop and a comparison to the average fee received in 2008. For table 2 only crops where at least 3 commercial beekeepers reported rentals are listed.

During the past ten years the average pollination rental fee has increased from 32^{85} (2000) to 89^{90} (2009), an increase of 174%. While dramatic gains in pollination fees have occurred, it needs to be stressed that honey bee colony rental was for many decades, an underpaid service to the agricultural industry at-large. It is really only within the past decade that rental fees have begun to more accurately reflect the enormous value-added service of managed pollination. Figure 1 depicts the average pollination fee paid since the beginning of the PNW pollination survey in 1986.

Within the PNW, tree fruits (apples, pears and sweet cherries) have been and remain the dominant crop types for pollination income. In 2009 the combination of apples, pears and sweet cherries and accounted for 37.1% of all reported rentals and 20.8% of all reported pollination income. Paradoxically, the single most important crop for PNW beekeepers is grown in California, *i.e.*, almonds. Almonds were responsible for 40.3% of all rentals and 67.4% of all rental income in the 2009 survey (see Table 4). Almonds have consistently produced a high average pollination fee and for the past four years have displayed remarkable fee increases compared to the 2005 average fee of 79^{40}: for 2006, 129^{20}; for 2007, 137^{35}; for 2008, 148^{15}; and for 2009, 150^{30}.

In 2009 the combination of California almonds and PNW tree fruit accounted for 77.4% of all rentals and 88.2% of all pollination income, which illustrates the dominance and importance of these crops for a commercial PNW beekeeper (see Table 4). All other PNW cropping systems that utilize honey bee pollination, contributed 11.8% to the beekeeper's gross pollination income in 2009.

In terms of acreage, apples are the largest crop grown in the PNW (almost 200,000 acres) and this is reflected by the large number of reported rentals (19.5% of all rentals and 10% of the total reported rental income).

The average PNW commercial honey bee colony was rented 1.83 times in 2009 and this includes California almonds. This is a slight decrease from 2008 (1.9 sets). This statistic has trended downwards since 1999 when the average number of rentals per colony was 2.8. Does this actually reflect the real world situation? Are PNW commercial beekeepers concentrating on almonds and tree fruit (which historically provide the major sources of pollination income) and reducing the number of colonies involved in minor crop pollination? Following almond pollination, are colonies being shifted away from pollination to concentrate on honey production? At this time our data are not able to provide reasonable answers to these questions.

For the 2009 pollination season, an average rental fee of 89^{90}, combined with an average of 1.83 pollination rentals per colony, results in an annual per colony pollination income of 164^{50}. Table 3 displays the

data concerning the trends of ever larger individual operations, and the increasing per colony income derived from pollination. With the "average" commercial operation running 5,140 colonies, a hypothetical 2009 gross pollination income for the "average" commercial beekeeping operation in the PNW was $845,530.

The combined colony numbers from those commercial beekeepers who responded to the 2009 survey, (66,827 hives), represent about 73% of the USDA's estimate of commercial colony numbers in Oregon and Washington. Therefore, if we multiply the total reported pollination income of the survey respondents ($10,998,747) by a factor of 1.37, we have a ball park estimate of the pollination income generated by commercial beekeeping in the PNW in 2009, *i.e.*, a regional pollination income of approximately 15 million dollars. This is far more than the "estimates" assigned to the bee industry by agricultural economists, who, for reasons unexplained, usually do not even include pollination rental income in their evaluation of beekeeping economics. Pollination income in the PNW far exceeds the value of honey and wax sales for our regional beekeeping industry. Pollination rental income is frequently four to five times greater than honey and wax sales in any given year. This disparity between pollination income and combined honey/wax sales has increased dramatically, especially in the past few years, concurrent with the impressive rise in pollination rental fees.

The 2009 survey once again asked commercial beekeepers to report the total number of full-time or full-time equivalent employees working for their operations. An interesting way to look at this question concerning the average number of full-time employees, is to ask "what is the colony equivalent", meaning, how many colonies are necessary in order to hire one full-time employee? That figure was very close to 1,500 colonies/employee in 2004 and 2005. In 2007 the "colony equivalent" was 1,125 hives per full-time employee, and for 2008, 870 hives. The reported "colony equivalent" for 2009 is 996 hives. Lower colony equivalent numbers suggest that hives are receiving more intensive management, which ultimately means healthier hives.

While colony income from pollination rental is a critical statistic, so therefore is the annual cost to maintain a healthy hive of honey bees. Numerous commercial beekeepers, who have over the years maintained accurate cost accounting records, have reported colony maintenance costs that are very reasonable relative to today's economy. The average annual hive maintenance cost was $173 per colony for the year 2009. The range in individual responses was from a high of $300/hive to a low of $75/hive. This wide range suggests that beekeepers should try to be more precise in calculating their operational costs. If you can't answer the question of your operating cost on a ***per colony basis***, you need to re-adjust your operational accounting.

For 2009 the average colony maintenance cost is once again higher than the average per colony pollination income. From the 2009 survey data, pollination income was 164^{50}/colony and the colony maintenance cost was $173; a difference of 8^{50} per colony. This illustrates that the net operational profit needs to be generated by sources of income outside of pollination rental, most frequently, honey production.

In interpreting the average pollination fee for an individual crop, it is important to recognize that the reliability of the "average" is strongly influenced by the number of reported rentals. The "average" for almonds

should be considered very realistic because of the large number of beekeepers and rentals reported for this crop, and such is also the case for tree fruit in the PNW. For this year's survey report, pollination rental averages for crops with fewer than 3 beekeepers reporting, have been excluded from Table 2, but these low reported crops have been included for computing the average pollination fee for all reported rentals.

It is important to remember that the data presented here represent the pollination rental situation of a hypothetical "average" commercial beekeeper in the Pacific Northwest. For individual beekeepers the survey results are most useful as benchmarks against which they should compare their individual operations. Let it be stressed again that all of these "projections" are only as accurate as the data provided by responding beekeepers. The projections also assume that the participating beekeepers collectively represent the mainstream of commercial beekeeping in the Pacific Northwest.

I wish to again thank all those beekeepers in Oregon and Washington who took the time to participate in the survey, which over the past 24 years, has generated the most accurate assessment of commercial pollination known in the U.S.

Table 1. Average Pollination Fee 2000 - 2009

2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
32.85	33.65	36.40	36.45	38.65	51.30	73.85	70.65	81.15	89.90

Table 2. 2009 Average pollination fees as reported by 13 commercial beekeeping operations.

Crop	No. Rentals	Avg. Fee	Fee +/-[1]
Pears	5,862	51^{40}	+21.4%
Cherries	15,605	51^{50}	+21.6%
Apples	23,858	49^{70}	+9.5%
Berries[2]	2,844	38^{40}	+26.9%
Blueberries	7,100	42^{50}	+15.2%
Vegetable seed	6,652	53^{75}	+13.6%
Clover seed[3]	3,435	46^{20}	+48.3%
Squash & Pumpkin	2,636	47^{30}	+2.3%
Meadowfoam	1,336	47^{30}	+4.3%
Almonds	49,318	150^{30}	+1.5%

Average Pollination Fee = 89^{90}

[1]% change from 2008
[2]Includes blackberries, raspberries, Marion berries, & Logan berries.
[3]Includes red & white clover as grown for seed.

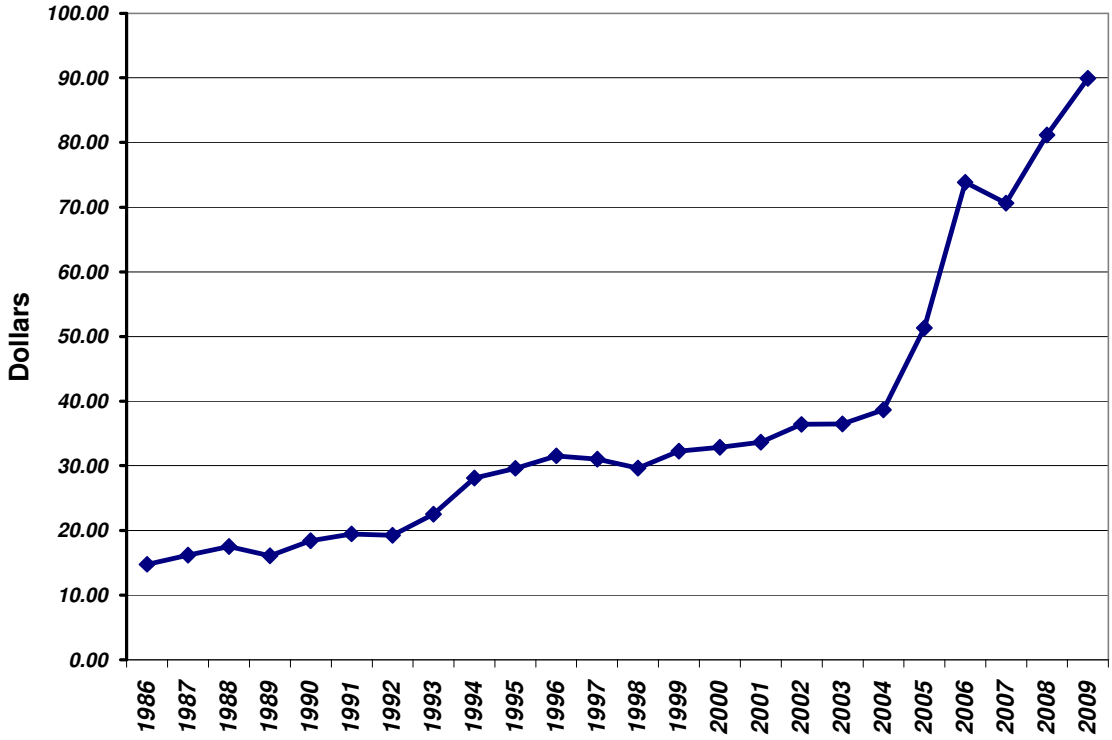
Table 3. Average colony numbers, average rental fee per hive, and average annual rental income per hive for a hypothetical commercial beekeeping operation in the Pacific Northwest 1992-2009.

Year	Average No. Colonies	Average Rental Fee	Average Annual Rental Income per Colony
1992	765	19^{25}	49^{70}
1993	990	22^{50}	62^{25}
1994	1,225	28^{10}	78^{70}
1995	1,348	29^{60}	78^{15}
1996	1,350	31^{55}	97^{50}
1997	1,504	31^{05}	92^{20}
1998	1,153	29^{65}	83^{00}
1999	2,058	32^{25}	89^{30}
2000	2,055	32^{85}	77^{40}
2001	3,168	33^{65}	64^{60}
2002	4,255	36^{40}	63^{75}
2003	2,612	36^{45}	86^{40}
2004	3,555	38^{65}	74^{60}
2005	2,055	51^{30}	112^{85}
2006	3,855	73^{85}	151^{10}
2007	3,091	70^{65}	176^{60}
2008	4,800	81^{15}	154^{20}
2009	**5,140**	**89^{90}**	**164^{50}**

Table 4. Pollination rentals and income by crop type as reported by 13 PNW commercial beekeepers in 2009.

Crop	# Rentals	% of total rentals	Rental Income	% of total rental income
Tree Fruit	45,325	37.1%	$2,290,447	20.8%
Almonds	49,318	40.3%	$7,410,980	67.4%
All other crops	27,667	22.6%	$1,297,320	11.8%
Total	122,310		$10,998,747	

Figure 1. PNW average pollination fee for all crops {including almonds}: 1986 – 2009.



Summary Information - 2009

Number of participating commercial beekeepers = **13**

Number of colonies in the survey = **66,827**

Total colony rentals = **122,310**

The average colony pollination rental fee (for all beekeepers, for all crops including California almonds) was:

$89^{90}

The average commercial colony was placed in **1.83** pollination sets in 2009, for an average per hive rental income of **$164^{50}**

The average commercial bee operation maintained 5,140 colonies and grossed **$845,530** in pollination rental income for 2009.